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(71) Applicant: **DIGISONIX, Inc.**
Middleton, Wisconsin 53562-2543 (US)

(72) Inventors:
- **Allie, Mark C.**
  Oregon, Wisconsin 53575 (US)
- **Eriksson, Larry J.**
  Madison, Wisconsin 53714 (US)
- **Brokish, Charles W.**
  Madison, Wisconsin 53713 (US)

(74) Representative: **Burke, Steven David et al**
R.G.C. Jenkins & Co.
26 Caxton Street
London SW1H 0RJ (GB)

(54) Active adaptive selective control system

(57) An active adaptive control system introduces a control signal from an output transducer (14) to combine with the system input signal (6) and yield a system output signal (8). An error transducer (16) senses the system output signal and provides an error signal (44). An adaptive filter model (40) has a model input from a reference signal (42) correlated to the system input signal, and an output outputting a correction signal (46) to the output transducer to introduce the control signal. Performance of the model is selectively controlled to control the signal sent to the output transducer. Various monitoring and control methods are provided, including spectral leak signal monitoring and control, correction signal monitoring and control, frequency responsive spectral transfer function processing of the leak signal and/or the correction signal, reference signal processing, and fuzzy logic control.

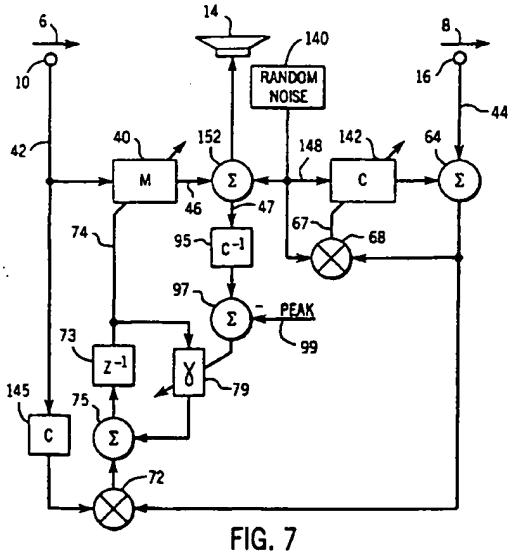

FIG. 7

EP 0 759 606 A3

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EUROPEAN SEARCH REPORT

Application Number
EP 96 30 6121

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X,D	EP 0 661 807 A (DIGISONIX INC) 5 July 1995 * column 2, line 52 - column 4, line 39 * * figures 4-6 *	1,2, 19-21, 23,27, 29,34, 37, 40-42,54	G10K11/178
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X	EP 0 517 525 A (MATSUSHITA ELECTRIC IND CO LTD) 9 December 1992 * page 5, line 9 - line 19 * * figures 1--,9 *	1	
X	KIPERSZTOK O: "ACTIVE CONTROL OF BROADBAND NOISE USING FUZZY LOGIC" PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON FUZZY SYSTEMS, SAN FRANCISCO, MAR. 28 - APR. 1, 1993, vol. 2, no. CONF. 2, 28 March 1993, pages 906-911, XP000371528 INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS * page 906 * * page 908, left-hand column - page 909, right-hand column *	43	TECHNICAL FIELDS SEARCHED (Int.Cl.6) G10K
X A	EP 0 471 290 A (HUGHES AIRCRAFT CO) 19 February 1992 * column 9, line 22 - column 10, line 22 * * figure 4 *	54,55 3	

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	22 October 1998	Castagné, O

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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Application Number
EP 96 30 6121

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A	US 5 018 202 A (TAKAHASHI MINORU ET AL) 21 May 1991 * figure 7 *	55	
A	WO 93 15501 A (ACTIVE NOISE & VIBRATION TECH) 5 August 1993 * the whole document *		
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